M. Cir.No.45.

## PENNSYLVANIA DEPARTMENT OF AGRICULTURE BUREAU OF PLANT INDUSTRY HARRISBURG

PA 177.4 No. 45

## THE OYSTER SHELL SCALE

The oyster shell scale (Lepidosaphes ulmi Linn.) was first reported from New England in 1794 and has since spread to practically every state doing considerable damage to fruit trees, silver maples, poplars, willows, ashes, horse-chestnuts, walnuts, lilacs, and over a hundred other trees and shrubs. Within the last few years it has been found to be very pernicious and is now rated as one of the most injurious of the common scale insects with which we must contend.

The scale resembles a miniature oyster shell about one-eight of an inch long and half as wide, dark brown in color and often curved in shape due to crowding on the branch. In Pennsylvania there are two broods or generations and they spend the winter as eggs under the adult scale covering. Injury is caused by the thousands of scales sucking the juices from the infested plant during the summer.

There are several parasites which live on this scale and at times seem to keep it in check in some districts. Birds, such as the chickadees, also assist in destroying many of the scales.

Control. The oyster shell scale is best controlled by a good penetrating spray material during the dormant season. A thorough application of lime-sulphur solution will kill a large percentage of the scales but two and sometimes three applications are necessary to kill all of the pests. The best known spray solutions for eradicating this scale are the miscible or soluble oil sprays. These oil sprays should be applied during the dormant season on a bright warm sunny day before the buds swell. Care should be taken to see that the spray is applied in time for the solution to dry off before evening and do not apply it in such quantities that it will collect at the base of the tree.

This scale may also be successfully controled in the summer time by spraying when the young are crawling, which will be during the latter part of May and the forepart of June. Then spray with fish-oil soap (one pound to four gallons of water with the addition of one part of "Black-leaf 40" to each 1000 parts of soap solution.)

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